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NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 OCT 02 CA/CAPLUS enhanced with pre-1907 records from Chemisches
Zentralblatt
NEWS 3 OCT 19 BEILSTEIN updated with new compounds
NEWS 4 NOV 15 Derwent Indian patent publication number format enhanced
NEWS 5 NOV 19 WPIX enhanced with XML display format
NEWS 6 NOV 30 ICSD reloaded with enhancements
NEWS 7 DEC 04 LINPADOCDB now available on STN
NEWS 8 DEC 14 BEILSTEIN pricing structure to change
NEWS 9 DEC 17 USPATOLD added to additional database clusters
NEWS 10 DEC 17 IMSDRUGCONF removed from database clusters and STN
NEWS 11 DEC 17 DGENE now includes more than 10 million sequences
NEWS 12 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in
MEDLINE segment
NEWS 13 DEC 17 MEDLINE and LMEDELINE updated with 2008 MeSH vocabulary
NEWS 14 DEC 17 CA/CAPLUS enhanced with new custom IPC display formats
NEWS 15 DEC 17 STN Viewer enhanced with full-text patent content
from USPATOLD
NEWS 16 JAN 02 STN pricing information for 2008 now available
NEWS 17 JAN 16 CAS patent coverage enhanced to include exemplified
prophetic substances
NEWS 18 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new
custom IPC display formats
NEWS 19 JAN 28 MARPAT searching enhanced
NEWS 20 JAN 28 USGENE now provides USPTO sequence data within 3 days
of publication
NEWS 21 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 22 JAN 28 MEDLINE and LMEDELINE reloaded with enhancements
NEWS 23 FEB 08 STN Express, Version 8.3, now available
NEWS 24 FEB 20 PCI now available as a replacement to DPCI
NEWS 25 FEB 25 IFIREF reloaded with enhancements
NEWS 26 FEB 25 IMSPRODUCT reloaded with enhancements

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 16:12:46 ON 25 FEB 2008

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 16:12:59 ON 25 FEB 2008

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STRUCTURE FILE UPDATES: 24 FEB 2008 HIGHEST RN 1005323-41-0

DICTIONARY FILE UPDATES: 24 FEB 2008 HIGHEST RN 1005323-41-0

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=>

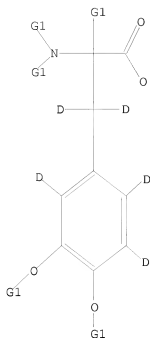
Uploading C:\Program Files\Stnexp\Queries\105398450R5-D.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 H,D

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 16:13:20 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 848 TO ITERATE

100.0% PROCESSED 848 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 15213 TO 18707

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 16:13:24 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 16612 TO ITERATE

100.0% PROCESSED 16612 ITERATIONS

35 ANSWERS

SEARCH TIME: 00.00.01

L3 35 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'CAPLUS' ENTERED AT 16:13:30 ON 25 FEB 2008

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FILE COVERS 1907 - 25 Feb 2008 VOL 148 ISS 9
FILE LAST UPDATED: 24 Feb 2008 (20080224/ED)

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=> s l3

L4 16 L3

=> s l4 not PY > 2003

5375704 PY > 2003

L5 14 L4 NOT PY > 2003

=> d l5 ibib abs hitstr l-

YOU HAVE REQUESTED DATA FROM 14 ANSWERS - CONTINUE? Y/(N):y

L5 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:260260 CAPLUS

DOCUMENT NUMBER: 120:260260

TITLE: Quantitative analysis of low molecular weight compounds of biological interest by matrix-assisted laser desorption ionization

AUTHOR(S): Duncan, Mark W.; Matanovic, Gabrijela; Cerpa-Poljak, Anne

CORPORATE SOURCE: Biomed. Mass Spectrometry Unit, Univ. New South Wales, Kensington, 2033, Australia

SOURCE: Rapid Communications in Mass Spectrometry (1993), 7(12), 1090-4

CODEN: RCMSEF; ISSN: 0951-4198

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Internal stds. were used to demonstrate that matrix-assisted laser desorption/ionization (MALDI) mass spectrometry can be applied to the quant. anal. of low mol. weight polar compds. Three examples were tested: a standard curve for 3,4-dihydroxyphenylalanine (DOPA) was prepared using a stable

isotope analog (i.e., [13C6]DOPA) as an internal standard; [2H16]-acetylcholine was employed as an internal standard for the quantification of acetylcholine; and in the final example, the peptide Ac-Ser-Ile-Arg-His-Tyr-NH₂ was used as an internal standard for the quantification of the peptide H-Ser-Ala-Leu-Arg-His-Tyr-NH₂. In each instance, straight line fits (r²>0.95) demonstrate that MALDI is a viable approach for the quant. anal. of low mol. weight analytes.

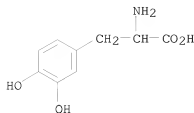
IT 154607-42-8

RL: ANST (Analytical study)

(as internal standard for determination of dihydroxyphenylalanine by matrix-assisted laser desorption ionization mass spectrometry)

RN 154607-42-8 CAPLUS

CN Tyrosine-13C6, 3-hydroxy- (9CI) (CA INDEX NAME)



L5 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:118039 CAPLUS

DOCUMENT NUMBER: 114:118039

TITLE: Fast enzymic preparation of L-DOPA from tyrosine and molecular oxygen: a potential method for preparing [oxygen-15]L-DOPA

AUTHOR(S): Maddaluno, Jacques F.; Faull, Kym F.

CORPORATE SOURCE: Sch. Med., Stanford Univ., Stanford, CA, 94305, USA

SOURCE: Applied Radiation and Isotopes (1990), 41(9), 873-8

CODEN: ARISEF; ISSN: 0883-2889

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A fast, simple, and inexpensive enzymic preparation of L-DOPA from mol. oxygen and tyrosine using mushroom tyrosinase is described. The theor. incubation time for production of [15O]L-DOPA with maximal specific activity from [15O]O2 can be calculated to be about 3 min. In practice, using a specially designed glass reaction chamber to facilitate the incorporation of gaseous mol. oxygen into L-DOPA with zero lag-time, a 3-min reaction with 1% oxygen in nitrogen results in the formation of approx. 3.9 μmol of L-DOPA, representing conversion of about 14% of the tyrosine substrate. Given access to a supply of [15O]O2, the method should be applicable to the preparation of [15O]L-DOPA for use as a PET tracer.

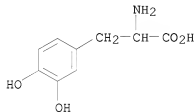
IT 132587-87-2P, preparation

RL: PREP (Preparation)

(preparation of, enzymic)

RN 132587-87-2 CAPLUS

CN L-Tyrosine, 3-hydroxy-, labeled with oxygen-15 (9CI) (CA INDEX NAME)



L5 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:508668 CAPLUS

DOCUMENT NUMBER: 113:108668

TITLE: Comparative in vivo metabolism of 6-[18F]fluoro-L-DOPA and [3H]L-DOPA in rats

AUTHOR(S): Melega, William P.; Luxen, Andre; Perlmutter, Milton

M.; Nissenson, Charna H. K.; Phelps, Michael E.; Barrio, Jorge R.

CORPORATE SOURCE: Sch. Med., UCLA, Los Angeles, CA, 90024, USA

SOURCE: Biochemical Pharmacology (1990), 39(12), 1853-60

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB In vivo double-labeled expts in rats were designed to correlate the peripheral and cerebral metabolism of 6-[18F]fluoro-L-DOPA ([18F]FDOPA) with that of [3H]L-DOPA. Authentic samples of the major [18F]DOPA metabolites were synthesized to identify the 18F-labeled metabolites. After carbidopa pretreatment and i.v. administration of the compound, the products of peripheral metabolism in plasma were analyzed at times from 3 to 60 min. In the periphery, amine conjugates were detected but they accounted for <15% of the total radioactivity; the major metabolites were 3-O-methyl-6-[18F]fluoro-L-DOPA and 3-O-methyl-[3H]L-DOPA. The rate and extent of 3-O-methylation of [18F]FDOPA exceeded that [3H]L-DOPA. Both 3-O-methylated products entered the striatum and cerebellum where they contributed significant but uniform activity. Anal. of cerebral metabolism in these structures indicated a linear accumulation of total radioactivity: a striatum/cerebellum ratio of 2 was observed by 60 min. 6-[18F]fluorodopamine (35%) and [3H]dopamine (55%) were the major metabolites formed in the striatum; however, the methylated [18F]FDOPA and [3H]DOPA products of predominantly peripheral origin represented 55% (18F) and 35% (3H) of the total radioactivity, resp. Other [3H]dopamine metabolites and their 18F-labeled analogs represented <10-15% at times analyzed. The cerebellum radioactivity was composed only of [18F]FDOPA, [3H]DOPA and their 3-O-methylated products. These data will serve as the basis for the development of kinetic models of [18F]FDOPA metabolism that can be applied to the evaluation of central dopamine biochem. with positron emission tomog. in humans.

IT 31104-98-0, biological studies

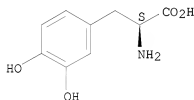
RL: BIOL (Biological study)

(metabolism of fluorodopa vs.)

RN 31104-98-0 CAPLUS

CN L-Tyrosine, 3-hydroxy-, labeled with tritium (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:403324 CAPLUS

DOCUMENT NUMBER: 107:3324

TITLE: Cerebral metabolism of 6-[18F]fluoro-L-3,4-dihydroxyphenylalanine in the primate

AUTHOR(S): Firnau, G.; Sood, S.; Chirakal, R.; Nahmias, C.; Garnett, E. S.

CORPORATE SOURCE: Chedoke-McMaster Hosp., McMaster Univ., Hamilton, ON, Can.

SOURCE: Journal of Neurochemistry (1987), 48(4), 1077-82

CODEN: JONRA9; ISSN: 0022-3042

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The tracers 6-[18F]fluoro-L-DOPA and L-[14C]DOPA were injected simultaneously into rhesus monkeys, and the time course of their metabolites was measured in the striatum and in the occipital and frontal cortexes. In the striatum, 6-[18F]fluoro-L-DOPA was metabolized to 6-[18F]fluorodopamine, 3,4-dihydroxy-6-[18F]fluorophenylacetic acid, and

6-[18F]fluorohomovanillic acid. The metabolite pattern was qual. similar to that of L-[14C]DOPA. 6-[18F]Fluorodopamine was synthesized faster than [14C]dopamine. In the frontal cortex, the major metabolite was also 6-[18F]fluorodopamine or [14C]dopamine. In the occipital cortex, the major metabolite was 3-O-methyl-6-[18F]fluoro-L-DOPA. On the basis of these data, the images obtained with 6-[18F]fluoro-L-DOPA and positron emission tomog. in humans can now be interpreted in neurochem. terms.

IT 108570-54-3

RL: BIOL (Biological study)

(as carbon-14-labeled DOPA metabolite, in brain, fluorine-18-labeled fluoro-DOPA metabolism in relation to)

RN 108570-54-3 CAPLUS

CN L-Tyrosine, 3-hydroxy-, hydrogen sulfate (ester), labeled with carbon-14 (9CI) (CA INDEX NAME)

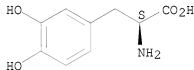
CM 1

CRN 38062-58-7

CMF C9 H11 N O4

CIL XC-14

Absolute stereochemistry.



CM 2

CRN 7664-93-9

CMF H2 O4 S



L5 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1984:403121 CAPLUS

DOCUMENT NUMBER: 101:3121

ORIGINAL REFERENCE NO.: 101:547a,550a

TITLE: Characteristics of kinetics of metabolism and the biological action of tritium-labeled organic compounds
 AUTHOR(S): Zhuravlev, V. F.; Kalyazina, N. S.; Klykov, O. V.; Goryacheva, T. I.

CORPORATE SOURCE: USSR

SOURCE: Biol. Effekty Mal. Doz. Radiatsii, M. (1983) 74-7
 From: Ref. Zh., Radiats. Biol. 1984, Abstr. No. 270102

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Title only translated.

IT 31104-98-0, biological studies

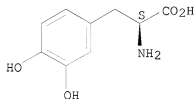
RL: ADV (Adverse effect, including toxicity); BPR (Biological process);
 BSU (Biological study, unclassified); BIOL (Biological study); PROC
 (Process)

(metabolism and toxicity of)

RN 31104-98-0 CAPLUS

CN L-Tyrosine, 3-hydroxy-, labeled with tritium (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:577974 CAPLUS

DOCUMENT NUMBER: 97:177974

ORIGINAL REFERENCE NO.: 97:29695a,29698a

TITLE: Standardization of tritium-labeled compounds

AUTHOR(S): Kalyazina, N. S.; Klykov, O. V.; Zhuravlev, V. F.; Moskalev, Yu. I.

CORPORATE SOURCE: USSR

SOURCE: Meditsinskaya Radiologiya (1982), 27(8), 53-7

CODEN: MERRA9; ISSN: 0025-8334

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The kinetics of the metabolism of tritium in rats following i.p. administration of tritiated organic compds. (thymidine, ethyleneglycol, cytidine, EtOH, glucose, AcOH, and dopa) differed from that of HTO. The rate of removal of tritium administered in an organic compound was slower than that of HTO. Also tissue levels of tritium were higher after administration of the label in organic compds. The toxicity of the organic tritiated compds. was also higher than that of HTO. The half-life constant, absorbed dose, and permissible concns. of tritium in workers exposed to HTO and the above-mentioned tritiated compds. were calculated

IT 31104-98-0, biological studies

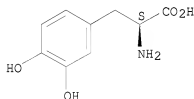
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(metabolism and permissible levels of, in humans and laboratory animals)

RN 31104-98-0 CAPLUS

CN L-Tyrosine, 3-hydroxy-, labeled with tritium (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:180880 CAPLUS

DOCUMENT NUMBER: 96:180880

ORIGINAL REFERENCE NO.: 96:29795a,29798a

TITLE: Deuterium exchange labeling of biologically important phenols, indoles, and steroids

AUTHOR(S): Vining, R. F.; Smythe, G. A.; Long, M. A.

CORPORATE SOURCE: Garvan Inst. Med. Res., St. Vincent's Hosp., Sydney, 2010, Australia

SOURCE: Journal of Labelled Compounds and Radiopharmaceuticals (1981), 18(11), 1683-92
CODEN: JLCRD4; ISSN: 0362-4803

DOCUMENT TYPE: Journal

LANGUAGE: English

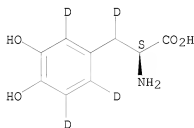
AB Deuterated analogs of phenolic steroids, catechols, and indole derivs. were prepared in high chemical yield by heating the relevant compound in D₂O at 190° in a sealed tube for 24 h. E.g., vanillin in D₂O gave >95% vanillin-5-d₁ almost exclusively. Care must be exercised in the heating of the sealed tubes due to considerable risk of explosion.

IT 81587-02-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by deuterium exchange reaction of parent compound with deuterium oxide)

RN 81587-02-2 CAPLUS

CN L-Tyrosine- β ,2,3,6-d₄, 5-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:100179 CAPLUS

DOCUMENT NUMBER: 96:100179

ORIGINAL REFERENCE NO.: 96:16401a,16404a

TITLE: Effect of the form of the introduced compound and isotopic carrier on the kinetics of carbon-14, tritium, and iodine-125 metabolism

AUTHOR(S): Moskalev, Yu. I.; Kalistratova, V. S.; Vasilenko, I. Ya.; Bugryshev, P. F.; Kalyazina, N. S.; Zhuravlev, V. F.

CORPORATE SOURCE: Inst. Biofiz., Moscow, USSR

SOURCE: Rep.-SAAS - Staatl. Amt Atomsicherh. Strahlenschutz DDR (1981), SAAS-280, Itogovaya Konf. Nauchno - Tekh. Sotr. Obl. Radiats. Bezop. Minist. Zdravookhr. SSSR Gos. Upr. At. Bezop. Zashch. Izluch. Period 1979 - 1980, 181-96
CODEN: RSADDL; ISSN: 0138-2551

DOCUMENT TYPE: Report

LANGUAGE: Russian

AB The effects of form (organic or inorg.) on the metabolism of ¹⁴C, ³H, and ¹²⁵I in rats were studied. The inorg. Na²¹⁴C¹⁴O₃, K²¹⁴C¹⁴O₃, and Ca¹⁴C¹⁴O₃ were rapidly absorbed by the gastrointestinal tract and ¹⁴C¹⁴O₂ was rapidly eliminated via respiration. The organic labeled compds. glucose-¹⁴C, glycine-¹⁴C, and palmitate-¹⁴C were also rapidly absorbed by the intestine, but greater amts. of label were found in tissues, especially after glycine and palmitate administration. Labeling of tissues was also higher following administration of tritiated organic compds. (dopa-³H, [³H]EtOH, glucose-³H, acetate-³H, thymidine-³H, and cytidine-³H) than after tritium oxide administration. Accumulation (30-day) of label from dopa-³H was less by a

factor of 3 and that of thymidine-3H was 28-fold greater than that of tritium oxide. In rats, resorption of 125I by the gastrointestinal tract was not affected by the presence of the isotope carrier 127I; however, incorporation of 125I by the thyroid gland was inhibited by the carrier.

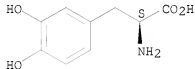
IT 38062-58-7, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolism of)

RN 38062-58-7 CAPLUS

CN L-Tyrosine, 3-hydroxy-, labeled with carbon-14 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1981:1628 CAPLUS

DOCUMENT NUMBER: 94:1628

ORIGINAL REFERENCE NO.: 94:335a,338a

TITLE: Tritiated DOPA: distribution in subcellular melanoma fractions and prospects for its radiotherapeutical use
AUTHOR(S): Gavrilenko, I. S.; Rumyantsev, P. P.; Bulychev, A. G.; Zarembskii, R. A.; Ivanov, I. I.

CORPORATE SOURCE: Lab. Cell. Morphol., Inst. Cytol., Leningrad, USSR

SOURCE: Radiobiologia, Radiotherapia (1980), 21(4), 525-31

CODEN: RDBGAT; ISSN: 0033-8184

DOCUMENT TYPE: Journal

LANGUAGE: German

AB DOPA-3H was prepared and after injection into mice with Harding-Passey melanoma, radioactivity was selectively incorporated into tumor melanosomes and especially mitochondria. The incorporation of label into these 2 tumor cell fractions was associated with increases in tyrosinase activity. The highly selective absorption of DOPA-3H by melanocytes indicates that DOPA may be useful as the carrier of an emitter for the internal radiation therapy of melanoma.

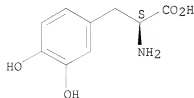
IT 31104-98-0, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolism of, by melanoma, radiotherapy in relation to)

RN 31104-98-0 CAPLUS

CN L-Tyrosine, 3-hydroxy-, labeled with tritium (9CI) (CA INDEX NAME)

Absolute stereochemistry.



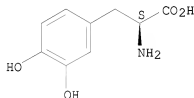
L5 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1979:18868 CAPLUS

DOCUMENT NUMBER: 90:18868

ORIGINAL REFERENCE NO.: 90:3087a,3090a
 TITLE: Autoradiographic and metabolic studies of
 Mycobacterium leprae
 AUTHOR(S): Khanolkar, Saroj R.; Ambrose, E. J.; Chulawala, R. G.;
 Bapat, C. V.
 CORPORATE SOURCE: Found. Med. Res., Worli, India
 SOURCE: Leprosy Review (1978), 49(3), 187-98
 CODEN: LEREA; ISSN: 0305-7518
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Highly purified suspensions of M. leprae showed a progressive increase in the incorporation of thymidine-3H and DOPA(I)-3H in short-term cultures as shown by scintillation counting. The intact bacilli are known to have a high permeability barrier. Apparently, I-3H becomes trapped within this barrier and oxidized inside the bacilli. Tests by pretreatment with di-Et diithiocarbamate, an inhibitor of I, cold I, or hyaluronidase distinguished the uptake of I-3H by bacilli from the effects of connective tissue contamination. Similar increases in the labeling of bacilli by scintillation counting were observed by autoradiog. of the organisms. The scintillation method shows promise for rapidly identifying drug resistance in lepromatous patients relapsing while on treatment with dapsone, rifampicin, clofazimine, or other anti-leprosy drugs.
 IT 31104-98-0, biological studies
 RL: BIOL (Biological study)
 (incorporation of, by Mycobacterium leprae, viability assessment by)
 RN 31104-98-0 CAPLUS
 CN L-Tyrosine, 3-hydroxy-, labeled with tritium (9CI) (CA INDEX NAME)

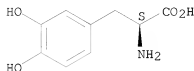
Absolute stereochemistry.



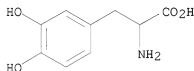
L5 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1973:402362 CAPLUS
 DOCUMENT NUMBER: 79:2362
 ORIGINAL REFERENCE NO.: 79:439a,442a
 TITLE: Preparation of L-tyrosine-ring-14C, L-dopa- ring-14C,
 and related metabolites
 AUTHOR(S): Ellis, B. E.; Major, G.; Zenk, M. H.
 CORPORATE SOURCE: Ruhr-Univ., Bochum-Querenburg, Fed. Rep. Ger.
 SOURCE: Analytical Biochemistry (1973), 53(2), 470-7
 CODEN: ANBCA2; ISSN: 0003-2697
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The reversibility of the tyrosine phenol-lyase reaction was utilized to develop a simple system in which phenol-14C is incorporated into L-tyrosine in high yield. By use of mushroom tyrosinase, catechol-14C can be prepared from phenol-14C and L-dopa-14C from L-tyrosine-14C. Catechol-14C can also be incorporated into L-dopa-14C by use of tyrosine phenol-lyase, giving the possibility of preparing dopa with 2 labeling patterns in the ring when starting from phenol-14C. Two further tyrosine metabolites, p-coumaric acid and homogentisic acid, were also enzymically prepared with 14C in the ring.
 IT 38062-58-7P
 RL: PREP (Preparation)

(preparation of)
RN 38062-58-7 CAPLUS
CN L-Tyrosine, 3-hydroxy-, labeled with carbon-14 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1973:148206 CAPLUS
DOCUMENT NUMBER: 78:148206
ORIGINAL REFERENCE NO.: 78:23833a,23836a
TITLE: Possible differential radiolysis of amino acid optical isomers by carbon-14-labeled betas
AUTHOR(S): Bernstein, William James; Lemmon, Richard M.; Calvin, Melvin
CORPORATE SOURCE: Lawrence Radiat. Lab., Univ. California, Berkeley, CA, USA
SOURCE: Mol. Evol. (1972), 151-5. Editor(s): Rohlfing, Duane L. Plenum: New York, N. Y.
CODEN: 26NJAU
DOCUMENT TYPE: Conference
LANGUAGE: English
AB No differential radiolysis of the D- and L-isomers was detected in samples of 14C-labeled DL-amino acids irradiated intrenally by β - particles and their bremsstrahlung derived from the 14C, for 12-24 years. The radiation doses were 2.5-10.4 %tme 107 rads. Norvaline, alanine, DOPA, aspartic acid, and methionine were analyze
IT 40857-06-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(differential radiolysis of isomers in)
RN 40857-06-5 CAPLUS
CN Tyrosine, 3-hydroxy-, labeled with carbon-14 (9CI) (CA INDEX NAME)



L5 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1972:527015 CAPLUS
DOCUMENT NUMBER: 77:127015
ORIGINAL REFERENCE NO.: 77:20937a,20940a
TITLE: Thin-layer chromatographic separation of optical isomers on labeled dopa via dipeptide formation
AUTHOR(S): Barooshian, Armen V.; Lautenschleger, Margaret J.; Harris, Wayne G.
CORPORATE SOURCE: Anal. Dep., New England Nucl. Corp., Boston, MA, USA
SOURCE: Analytical Biochemistry (1972), 49(2), 569-71
CODEN: ANBCA2; ISSN: 0003-2697
DOCUMENT TYPE: Journal
LANGUAGE: English
AB DL-Dopa-carboxyl-14C reacted with L-leucine-N-carboxy anhydride to give a

diastereomeric mixture of L-Leu-D-Dopa-14C (I) and L-Leu-L-Dopa-14C (II).
Thin-layer chromatog. of I and II gave Rf 0.38 and 0.56, resp.

IT 38062-58-7

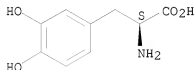
RL: PRP (Properties)

(optical purity of, determination by thin-layer chromatog. of dipeptides of)

RN 38062-58-7 CAPLUS

CN L-Tyrosine, 3-hydroxy-, labeled with carbon-14 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:72582 CAPLUS

DOCUMENT NUMBER: 74:72582

ORIGINAL REFERENCE NO.: 74:11727a

TITLE: [3H]-Dopa in [3H]-tyrosine with high specific activity: a serious complication in the study of catechol amine metabolism

AUTHOR(S): Waldeck, Bertil

CORPORATE SOURCE: Dep. Pharmacol., Univ. Goteborg, Goteborg, Swed.

SOURCE: Journal of Pharmacy and Pharmacology (1971), 23(1), 64-5

CODEN: JPPMAB; ISSN: 0022-3573

DOCUMENT TYPE:

LANGUAGE: Journal

English

GI For diagram(s), see printed CA Issue.

AB The use of 3H-labeled tyrosine (I) with high specific activity, contaminated with 10% 3H-labeled dopa (3,4-dihydroxyphenyl-alanine), for the study of catechol amine metabolism in rats gave abnormally high values for the yields of labeled noradrenaline and dopamine. The levels of radioactive metabolites in heart were most significantly increased by the contamination, as compared with those in the caudate nucleus and the spinal cord.

IT 31104-98-0

RL: ANST (Analytical study)

(catechol amine metabolism studies in response to)

RN 31104-98-0 CAPLUS

CN L-Tyrosine, 3-hydroxy-, labeled with tritium (9CI) (CA INDEX NAME)

Absolute stereochemistry.

